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| APPLICATION NO.  | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.       | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------------|------------------|
| 10/517,735   | 08/08/2005  | Ian Richard Webb     | R&G C-388                 | 5929             |
| 23474 7590 04/06/2007<br>FLYNN THIEL BOUTELL & TANIS, P.C.<br>2026 RAMBLING ROAD<br>KALAMAZOO, MI 49008-1631 |             |                      | EXAMINER<br>RIPLEY, JAY R |                  |
|  |             |                      | ART UNIT                  | PAPER NUMBER     |
|  |             |                      | 3679                      |                  |

| SHORTENED STATUTORY PERIOD OF RESPONSE | MAIL DATE  | DELIVERY MODE |
|--|------------|---------------|
| 3 MONTHS                               | 04/06/2007 | PAPER         |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/517,735

Applicant(s)

WEBB ET AL.

Examiner

Jay R. Ripley

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 08/08/2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 10-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 10-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12/06/2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>08/08/2005</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Priority***

1. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d).

### ***Information Disclosure Statement***

2. The information disclosure statement (IDS) filed on 08/08/2005 was considered by the examiner.

### ***Drawings***

3. The drawings are objected to because in Figure 1, it appears the reference characters "52" and "54" are pointing to the same physical feature. Further, it is unclear as to the physical feature the reference character "45" in Figure 2 is in reference to; a leader line to the inner sleeve would clarify the issue. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be

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necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### *Specification*

4. The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

#### **Arrangement of the Specification**

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) THE NAMES OF THE PARTIES TO A JOINT RESEARCH AGREEMENT.
- (e) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC.
- (f) BACKGROUND OF THE INVENTION.
  - (1) Field of the Invention.
  - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (g) BRIEF SUMMARY OF THE INVENTION.
- (h) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
- (i) DETAILED DESCRIPTION OF THE INVENTION.
- (j) CLAIM OR CLAIMS (commencing on a separate sheet).
- (k) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
- (l) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

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5. The disclosure is objected to because there are no headings.
6. The disclosure is objected to because of the following informalities: in page 7, line 4, "members 20" should be --members 20--.
7. The claims are objected to because the lines are crowded too closely together, making reading difficult. Substitute claims with lines one and one-half or double spaced on good quality paper are required. See 37 CFR 1.52(b).
8. Appropriate correction is required.

#### ***Claim Objections***

9. Claim 10 is objected to because of the following informalities: in lines 14-16, "the casing presses the sealing sleeve against the pipe ends to form seals, and forcing the teeth on the gripping ring" should be --the casing presses the sealing sleeve against the pipe ends to form seals, forcing the teeth on the gripping ring--. Appropriate correction is required.
10. Claim 15 is objected to because of the following informalities: in line 2, "arranged such that as the bolts are tightened," should be --arranged such, that as the bolts are tightened,--. Appropriate correction is required.

#### ***Claim Rejections - 35 USC § 112***

11. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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12. Claims 14, 15, 22, 23, and 24 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

13. In regard to claims 14, it is recited, “nuts are of a size that fits between the sides of the reinforcing member so as to prevent rotation of the nuts” in lines 2-3. Which sides of the reinforcing member is the claim pertaining to?

14. In regard to claims 15 and 23, it is unclear as to how “the radially projecting flanges can be drawn together thereby applying a radially compressive force to the casing” as recited. Tightening the bolts should result in a radially compressive force being transmitted to components radially encircled by the casing; however, the casing experiences forces directed radially outward when the fastening bolts are tightened.

15. In regard to claims 22, it is recited, “nuts are of a size that fits between the sides of the reinforcing member so as to prevent rotation of the nuts” in lines 2-3. Are these “sides” the longitudinal flanges of claim 11?

***Claim Rejections - 35 USC § 102***

16. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

17. Claims 10, 11, 16, 17, 19, and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Straub (U.S. 5,273,322).

18. In regard to claim 10, Straub, in Figures 1-5, below, discloses a pipe coupling for connecting together the ends of two pipes, comprising:

a tubular casing (10) having circumferentially extending end flanges (14) projecting inwardly from the axial ends of the casing,

a tubular sealing sleeve (32) inside the casing;

tensioning (52 and 53) means for tightening the casing around the sealing sleeve; and

frusto-conical gripping rings (44) located within the casing at opposite ends of the casing, the inner edges of the gripping rings being formed with teeth (68);

the casing comprising a strip of metal formed into a tube with a gap (as observed in Figure 1) extending longitudinally of the casing between the free ends of the strip;

the tensioning means interconnecting the free ends of the strip;

the arrangement being such that when the coupling is placed around the ends of two pipes to be connected and the tensioning means are tightened, the casing presses the sealing sleeve against the pipe ends to form seals, forcing the teeth on the gripping ring to bite into the surface of the pipes to grip the pipes;

characterized in that the free ends of the strip are bent outwardly to form radially projecting flanges extending longitudinally of the casing on opposite sides of the gap, the two radially projecting flanges being placed between two reinforcing members (50) which extend substantially the length of the coupling, the tensioning means passing through sets of aligned

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holes in the reinforcing members and the radially projecting flanges, the reinforcing members each having an angled cross-section (the reinforcing members are U-shaped [column 3, lines 8-9] and, therefore, there is an angle formed by the junction of the straight sides and the curved portion as shown in Figure 1 cutout, below) of the , a web portion (shaded in Figure 1 cutout, below) through which the holes for the tensioning means pass, and a flange running along the longitudinal edge of the web portion that is nearer to the axis of the coupling, the flange of the reinforcing member bearing against the tubular portion of the casing.

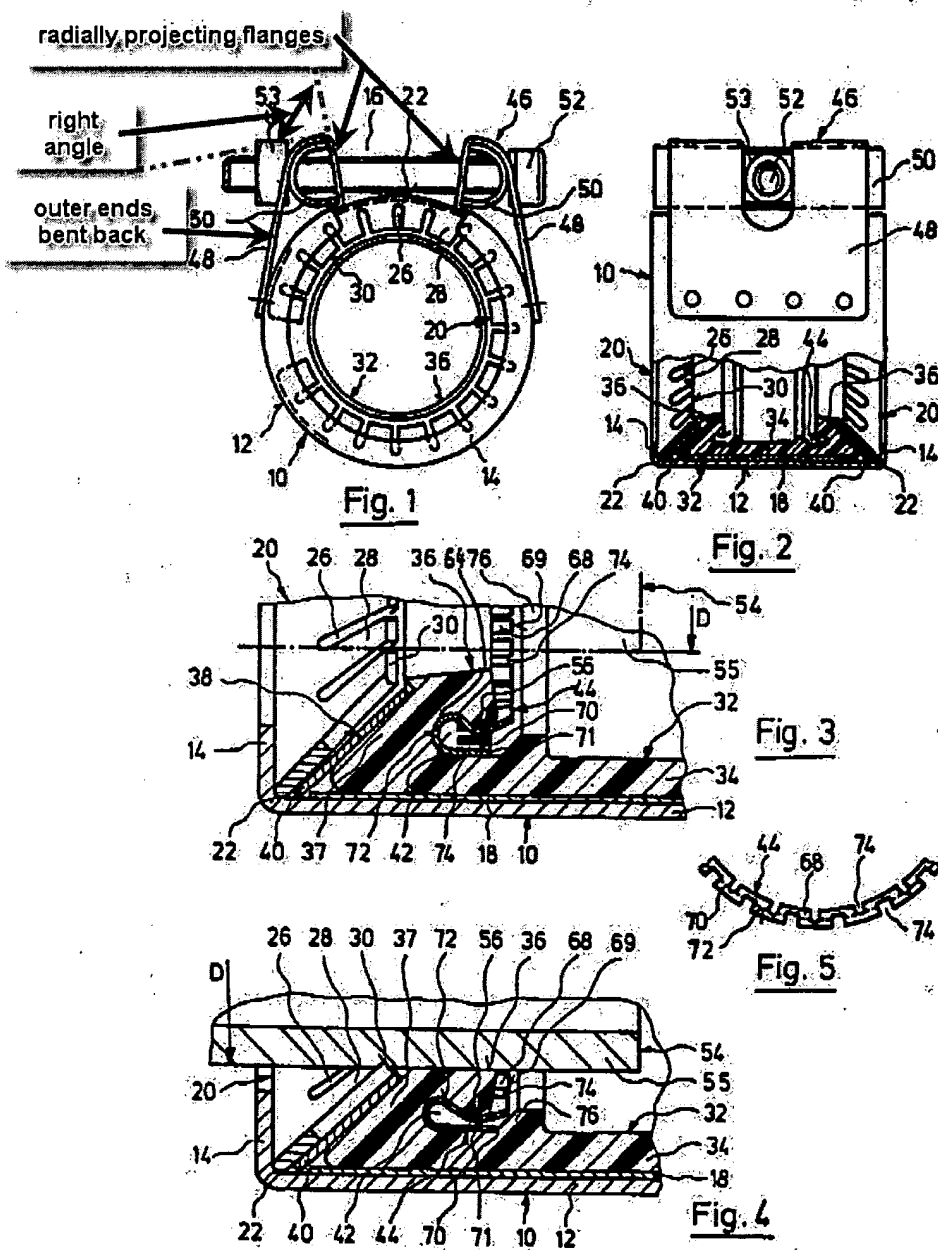


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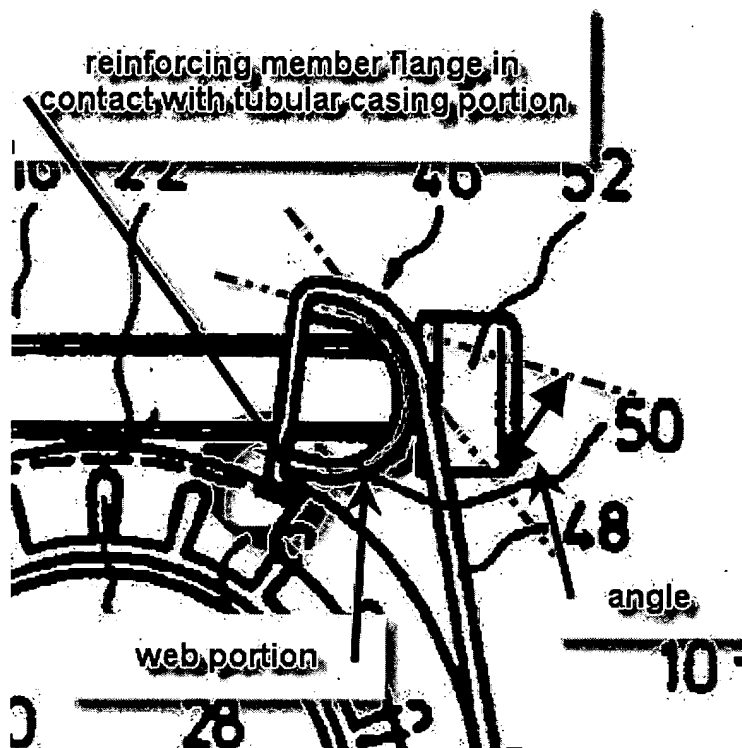
U.S. Patent

Dec. 28, 1993

5,273,322



(Straub Figures 1-5)



(Straub Figure 1 cutout)

19. In regard to claim 11, Straub further discloses that each reinforcing member has a channel-shaped cross section with flanges (the straight sides of the U-shape) running along both longitudinal edges of the web portion (as observed in Figure 1 cutout, above).
20. In regard to claim 16, Straub further discloses that the aligned holes are elongated in the radial direction (as observed in Figure 2).
21. In regard to claim 17, Straub further discloses a backing ring (40 in Figure 3, above) is provided inside the casing adjacent each gripping ring (44) between the gripping ring and the sealing sleeve (32) to prevent the sealing sleeve bulging between the teeth of the gripping ring.
22. In regard to claim 19, Straub further discloses that the outer ends of the radially projecting flanges are bent back to form stiffening flanges (as observed in Figure 1, above) along the longitudinal outer edges of the radially projecting flanges.

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23. In regard to claim 20, Straub further discloses that the radially projecting flanges are bent back at right angles (as observed in Figure 1, above).

***Claim Rejections - 35 USC § 103***

24. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

25. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

26. Claims 12, 13, 15, 18, 21, and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Straub as applied above, and in further view of Schreiter (U.S. 6,206,434).

27. In regard to claim 12, 13, and 21, Straub discloses the claimed invention except for two sets tensioning means. Schreiter teaches a split sleeve pipe coupling, in Figures 1-3, which uses two sets of tensioning means (10) to distribute the tightening forces from tightening over the reinforcing members (5 and 6). As Schreiter relates to split sleeve pipe couplings, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify

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the pipe coupling as disclosed by Straub with two sets of tensioning means as taught by Schreiter to distribute the tightening forces from tightening over the reinforcing members.

28. In regard to claims 15 and 23, Straub further provides for as the bolts are tightened, the radially projecting flanges are drawn together (column 3, lines 19-35).

29. In regard to claim 18, Straub discloses the claimed invention except for an inner sleeve inside the sealing sleeve. Schreiter teaches a split sleeve pipe coupling, in Figures 1-3, which uses an inner sleeve (18) to ensure that in the clamped position, that the material of the sealing sleeve will not squeeze between the ends of the pipes (column 3, lines 29-34). As Schreiter relates to split sleeve pipe couplings, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the pipe coupling as disclosed by Straub with an inner sleeve inside the sealing sleeve as taught by Schreiter to ensure that in the clamped position, that the material of the sealing sleeve will not squeeze between the ends of the pipes.

***Allowable Subject Matter***

30. Claims 14, 22, and 24, would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

31. The following is a statement of reasons for the indication of allowable subject matter:

In regard to claims 14, upon which claim 24 is dependent, and claim 22, the prior art of record fails to teach or suggest a split sleeve pipe clamp with separate reinforcing members in which the sides of the reinforcing member prevent the respective tensioning means nuts from rotating.

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***Conclusion***

32. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Wagner et al (U.S. 4,790,574) and McDowell (U.S. 4,473,246).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jay R. Ripley whose telephone number is 571-272-7535. The examiner can normally be reached on 6:00AM - 3:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P. Stodola can be reached on 571-272-7087. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



J. R. Ripley  
30 MAR 2007



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